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| Substitute Form PTO-1449 (Modified) Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b)) | U.S. Department of Commerce Intellectual Property Trademark Office | Attorney's Docket No. 07763-057001 | Application No. 10/791,502 |
| | Applicant Fred R. Kramer, et al. | | |
| | Filing Date March 2, 2004 | | Group Art Unit 1637 |
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U.S. Patent Documents

| Examiner Initial | Desig. ID | Document Number | Publication Date | Patentee | Class | Subclass | Filing Date If Appropriate |
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| | AA | | | | | | |
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Foreign Patent Documents or Published Foreign Patent Applications

| Examiner Initial | Desig. ID | Document Number | Publication Date | Country or Patent Office | Class | Subclass | Translation | |
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Other Documents (include Author, Title, Date, and Place of Publication)

| Examiner Initial | Desig. ID | Document |
|------------------|-----------|---|
| SP | AQ | V. A. Bloomfield, D. M. Crothers and I. Tinoco, Jr., <i>Nucleic Acids: Structure, Properties, and Functions</i> (1999); Ch. 8, pps. 258-333 entitled "Conformational Changes", by D. H. Turner. |
| SP | AR | D. Freifelder, <i>Physical Biochemistry, Second Edition</i> (1982) "The Concept of Native and Denatured Structures"; pps. 19 -29 |
| | AS | |
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| Examiner Signature /Suchira Pande/ | Date Considered 09/11/2006 |
| EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. | |


Sheet 1 of 1

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|------------------|-----------|-----------------|------------------|---------------|-------|----------|----------------------------|
| SP | AA | 5,607,834 | Mar. 4, 1997 | Bagwell | | | |
| SP | AB | 6,331,438B1 | Dec. 18, 2001 | Aylott et al. | | | |
| | AC | | | | | | |
| | AD | | | | | | |
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Substitute Disclosure Form (PTO-1449)

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| U.S. Patent Documents | | | | | | | |
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| SP | AA | 5,925,517 | Jul. 20, 1999 | Tyagi et al. | | | |
| SP | AB | 6,150,097 | Nov. 21, 2000 | Tyagi et al. | | | |
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| | | | | | | | Yes | No |
| SP | AL | WO/00/14278 | Mar. 16, 2000 | WIPO | | | | |
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| SP | AQ | Adessi, et al. "Solid phase DNA amplification: characterisation of primer attachment and amplification mechanisms" <i>Nucleic Acids Research</i> , (2000) Vol. 28, No. 20 e87 |
| SP | AR | Albert et al., "Automatic decoding of sensor types within randomly ordered, high-density optical sensor arrays" <i>Analytical and Bioanalytical Chemistry</i> , (August 2002) Vol. 373, No. 8, pp: 792 - 802 |
| SP | AS | Bonnet, et al. "Thermodynamic basis of the enhanced specificity of structured DNA probes", <i>Proc. Natl. Acad. Sci.</i> (May 1999) Vol. 96, pp. 6171-6176 |
| SP | AT | Braeckmans, et al. "Encoding Microcarriers: Present and Future Technologies" <i>Nature Publishing Group, Nature Reviews</i> , (June 2002) Vol. 1 pp. 447-456 |

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| SP | AU | Brenner, et al. "Gene expression analysis by massively parallel signature sequencing (MPSS) on microbead arrays" <i>Nature Biotechnology</i> , (June 2000) Vol. 18, pp: 630-634 | | |
| SP | AV | Brown, et al. "Molecular beacons attached to glass beads fluoresce upon hybridisation to target DNA" <i>Chem. Commun.</i> (2000), 621-622 | | |
| SP | AW | Call, et al. "Fabrication of DNA Microarrays Using Unmodified Oligonucleotide Probes" <i>BioTechniques</i> , (February 2001) 30: 368-379 | | |
| SP | AX | Chen, et al. "A Microsphere-Based Assay for Multiplexed Single Nucleotide Polymorphism Analysis Using Single Base Chain Extension" <i>Genome Research</i> (2000) 10: 549-557 | | |
| SP | AY | Danowski, et al. "Evaluating the chemical spatial resolution of imaging fiber chemical sensors" <i>Microchemical Journal</i> (2001) 70: 51-61 | | |
| SP | AZ | Dickinson, et al. "Convergent, Self-Encoded Bead Sensor Arrays in the Design of an Artificial Nose" <i>Analytical Chemistry</i> , (June 1, 1999) 71: 2192-2198 | | |
| SP | AAA | Epstein, et al. "High-Density Fiber-Optic Genosensor Microsphere Array Capable of Zeptomole Detection Limits" <i>Analytical Chemistry</i> (2002) 74: 1836-1840 | | |
| SP | ABB | Epstein, et al. "Combinatorial Decoding: An approach for Universal DNA Array Fabrication" <i>J. Am. Chem. Soc.</i> (2003) 125: 13753-13759 | | |
| SP | ACC | Ferguson, et al. "A fiber-optic DNA biosensor microarray for the analysis of gene expression" <i>Nature Biotechnology</i> (December 1999) 14: 1681-1684 | | |
| SP | ADD | Ferguson, et al. "High-Density Fiber-Optic DNA Random Microsphere Array" <i>Analytical Chemistry</i> (November 2000) 72: 5618-5624 | | |
| SP | AEE | Guo, et al. "Direct fluorescence analysis of genetic polymorphisms by hybridization with oligonucleotide arrays on glass supports" <i>Nucleic Acids Research</i> , (1994) 22: 5456-5465 | | |
| SP | AFF | Han, et al. "Quantum-dot tagged microbeads for multiplexed optical coding of biomolecules" <i>Neuter Biotechnology</i> (July 2001) 19: 631-635 | | |
| SP | AGG | Kellar, et al. "Multiplexed microsphere-based flow cytometric assays" <i>Experimental Hematology</i> (2002) 30: 1227-1237 | | |
| SP | AHH | Lee, et al. "Importance of replication in microarray gene expression studies: Statistical methods and evidence from repetitive cDNA hybridizations" <i>PNAS</i> (August 29, 2000) 97: 9834-9839 | | |
| SP | AII | Liu, et al. "Molecular Beacons for DNA Biosensors with Micrometer to Submicrometer Dimensions" <i>Analytical Biochemistry</i> (2000) 283: 56-63 | | |
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| SP | AKK | Marras, et al. "Efficiencies of fluorescence resonance energy transfer and contact-mediated quenching in oligonucleotide probes" <i>Nucleic Acids Research</i> (2002) 30: e122 | | |
| SP | ALL | Michael, et al. "Randomly Ordered Addressable High-Density Optical Sensor Arrays" <i>Analytical Chemistry</i> (1998) 70: 1242-1248 | | |
| SP | AMM | Miller, Kelli "Downsizing DNA Assays - - Pharmascq's microtransponders prove that bigger isn't always better" <i>The Scientist</i> (2002) 16[1]: 52 | | |
| SP | ANN | Nicewarner-Pena, et al. "Submicrometer Metallic Barcodes" <i>Science</i> (2001) 294: 137-141 | | |
| SP | AOO | Oliphant, et al. "BeadArray™ Technology: Enabling an Accurate, Cost-Effective Approach to High-Throughput Genotyping" <i>BioTechniques</i> (June 2002) 32: S56-S61 | | |

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| SP | APP | Rosenthal, Sandra J. "Bar-coding biomolecules with fluorescent nanocrystals" <i>Nature Biotechnology</i> (2001) 19: 621-622 | | | | | |
| | AQQ | Spiro, et al. "A Bead-Based Method for Multiplexed Identification and Quantitation of DNA Sequences Using Flow Cytometry" <i>Applied and Environmental Microbiology</i> (2000) 66: 4258-4265 | | | | | |
| | ARR | Spruill, et al. "Assessing Sources of Variability in Microarray Gene Expression Data" <i>BioTechniques</i> (2002) 33: 916-923 | | | | | |
| | ASS | Steemers, et al. "Screening unlabeled DNA targets with randomly ordered fiber-optic gene arrays" <i>Nature Biotechnology</i> (2000) 18: 91-94 | | | | | |
| | ATT | Tsagkatakis, et al. "Spatial and Spectral Imaging of Single Micrometer-Sized Solvent Cast Fluorescent Plasticized Poly(vinyl chloride) Sensing Particles" <i>Analytical Chemistry</i> (2001) 73: 3153-320 | | | | | |
| | AUU | Tyagi et al, "Molecular Beacons: Probes that Fluoresce upon Hybridization" <i>Nature Biotechnology</i> (1996) 14: 303-308 | | | | | |
| | AVV | Tyagi et al. "Multicolor molecular beacons for allele discrimination" <i>Nature Biotechnology</i> (1998) 16: 49-53 | | | | | |
| | AWW | Tyagi et al. "Taking a census of mRNA populations with microbeads" <i>Nature Biotechnology</i> (2000) 18: 597-598 | | | | | |
| | AXX | Walt, David R. "Bead-based Fiber-Optic Arrays" <i>Science</i> (2000) 287: 451-452 | | | | | |
| | AYY | Walt, David R. "Imaging optical sensor arrays" <i>Current Opinion in Chemical Biology</i> (October 2002) 6: 689-695 | | | | | |
| | AZZ | Yang, et al. "BADGE, BeadsArray for the Detection of Gene Expression, a High-Throughput Diagnostic Bioassay" <i>Genome Research</i> (2001) 11: 1888-1898 | | | | | |
| | AAAA | Yeakley, et al. "Profiling alternative splicing on fiber-optic arrays" <i>Nature Biotechnology</i> (2002) 20: 353-358 | | | | | |
| SP | ABBB | PharmaSeq, Inc. "Animation: Principle of Microtransponder-Based Assay" http://www.pharmaseq.com/tech.html#desc (pp. 1-3) 2009. | | | | | |

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